
Shell
Eco-marathon
SKF
Autodesk

WHO ARE WE?

- Established in the summer of 1997
- A team consisting of students with various disciplines with the goal of designing, building, and racing a solar car
- Provide students with a place to apply classroom knowledge.
- Test new technologies in energy generation, storage and use.
- Test our skills, ideas and technology through competition with other schools.
- Promote and raise awareness of solar technology

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ARIZONA SOLAR RACING TEAM

DAEDALUS

Achievements:

- Sunrayce 99 Qualifiers 6th place
- Sunrayce 99 24th place

Daedalus was the first solar car in the team's history. The project took 2 years to complete. The team finished as the best new team in the Sunrayce 99 competition.

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MONSOON

Achievements:

- 2001 Formula Sun 4th in class (9th overall)
- 2001 American Solar Challenge 1st in class. (9th overall)

Monsoon was the team's second solar car. It was built based on lessons learned from Daedalus, Monsoon took first place in its class in the American Solar Challenge 2001.

Turbulence

Acheivements:
2003 American Solar Challenge
10th place

Turbulence was one of only a few teams to finish the American Solar Challenge 2003 under its own power, where over half of the participants did not.

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Drifter

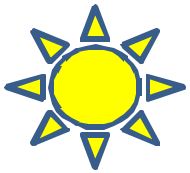
Achievements:

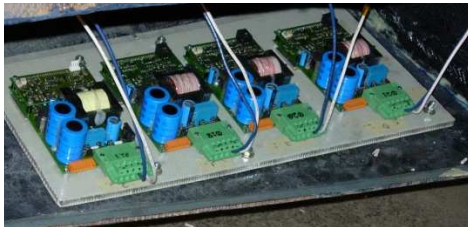
- 2005 North American Solar Challenge
- (Received Good Sportsmanship Award)
- 2008 North American Solar Challenge (10th place)

Our longest race of 2400 miles across the US and Canada

North American Solar Challenge
Dallas to Calgary
2008

HOW DOES A SOLAR CAR WORK?





Maximum power point trackers

Battery Protection System

Main Relay

Motor

Motor controller

COMPETITIONS

NORTH AMERICAN SOLAR CHALLENGE

The North American Solar Challenge is a competition to design, build and race solar-powered car in a cross-country event.

Shell Eco-marathon Americas

Design and build a vehicle that uses the least amount of fuel to travel the farthest distance.

CURRENT DIRECTION

- Shell Eco-marathon
- Urban challenge category
  - Design an efficient conventional vehicle
  - MPG race
- Why?
  - Design more practical solar car
  - Solve urban driving problems

Mallory

- 2nd best MPG
  - 3,149 mi/gal
    - (using conversion factor)
- Urban challenge category
- Steel space frame
- Fiber glass body
- Space grade GaAs cells, ~700 Watts
- 46 A-hr Lithium-polymer battery pack
- Max speed: 22 mph
- Range: 40-60 miles

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Please support our 2011 car!

Follow our progress at www.solarcar.arizona.edu